3.3.3 RAM 145 Alternative

In an effort to help develop a viable project with additional minimization of impacts, the USEPA provided limited, preliminary information on another alternative in October 2012. The USEPA provided additional information on this preliminary alternative in early January 2013. For development of the alternative, a consultant under contract to the USEPA used readily available data to prepare a geologic model, analyze excess spoil fills, analyze backfill volumes, and analyze the amount of spoil material associated with each mining area in the mine plan. Rather than use the AOC+ model, as required in West Virginia to calculate the amount of material that could be backfilled in the mined area, the consultant used the Kentucky Division of Mine Permits Reclamation Advisory Memorandum #145 (RAM 145) to guide this effort. Both models provide methodologies for achieving approximate original contour after mining is conducted, as required by law, and minimizing excess overburden and spoils from proposed mining operations.

According to the USEPA, they identified an alternative that would reduce environmental impacts while retaining the original mine plan, SMCRA permit area, and mined coal tonnage. After completing its analysis, the USEPA prepared a brief technical memorandum and offered it for review to the Corps, FHWA, WVDOH, and WVDEP in January 2013. A copy of that memorandum is included with other agency correspondence in the appendix of this SEIS.

The USEPA proposed a "mine only" alternative first utilizing a RAM 145 model that assumed the King Coal Highway would remain in its original corridor. According to the USEPA, this would allow for an alternative that could be developed utilizing five valley fills and 18,467 If of stream impact.

Following the initial development of this alternative, a highway alignment was added to it to merge mining and highway needs. According to the USEPA consultant, WVDOH parameters were incorporated into the alternative, assuring that the same termini, alignment, curvatures, grades, and design speeds were portrayed; however, WVDOH has not approved the alignment. Some adjustments were made to the conceptual alignment to determine the sizes and locations of any additional fills necessary to accommodate the proposed roadway. This alternative would, however, eliminate commercial and residential development from the PMLU. The result was a mining project that would utilize seven valley fills and 26,235 If of stream impact.

Upon review, however, the Corps and FHWA determined that the proposed RAM 145 alternative would not meet the project's purpose, particularly its consistency with the state's master land use planning process; would not be practical from an engineering viewpoint; and would be contrary to a consent decree entered by the U.S. District Court requiring the use of the AOC+ model in West Virginia. Specifically, by eliminating commercial and residential development from the project, the intertwined reasons for undertaking the project (i.e., to provide the roadbed for a portion of the King Coal Highway; to provide for post-mining economic development; and to allow coal to be mined) were not being completely addressed.

The WVDEP specifically expressed concern that the RAM 145 alternative was not consistent with the state's land use planning process. Under state law, counties with surface-mined properties are required to produce a land use master plan for coal operators to use for potential post-mine development within their mining permit boundaries. These plans specifically deal with uses of mined properties in accordance with the West Virginia Code and OSM regulations. The Mingo County Master Land Use Plan envisions highway and economic development parcels in the Buffalo Mountain area and state law requires post-mining land use to be in accordance with the land uses specified in a county land use plan [W.Va. Code Sec. 22-3-10(a)(3)].

The WVDEP also noted that the AOC+ model is mandated by a consent decree entered by the U.S. District Court (Bragg vs. Robertson 2000) and has been approved by the USEPA, the Corps, and the OSM for use in West Virginia. The AOC+ policy defines the methods for calculating the amount of material that can be backfilled in the mined area, raises the elevation of the valley fills above the elevation of the lowest coal seam, and requires the use of efficient excess spoil disposal areas. As a result of the consent decree, and subsequent agreements with state and federal regulatory agencies, the use of AOC+ modeling is standard practice in West Virginia.

The WVDEP also expressed uncertainty that the RAM 145 alternative would work from a practical engineering standpoint. According to the WVDEP, some of the valley fills proposed in the alternative appears to exceed state regulatory limitations on original ground slope at their toe locations. The WVDEP indicated it appears that the decks of the redesigned valley fills have significant overstacking.

Based on the limited information provided by USEPA to date and the information provided by WVDEP, the Corps and the FHWA have made the determination that the RAM 145 alternative is not a viable or practicable alternative. If the Corps and the FHWA receive additional information from USEPA, this determination will be re-evaluated prior to issuance of the Final SEIS.